# Statement of Basis

#### DRAFT RCRA PERMIT MODIFICATION

Philip Services Georgetown Facility 734 S. Lucile St. Seattle, Wa. 98108 WAD 00081 2909

The United States Environmental Protection Agency (EPA) proposes to modify the Hazardous Waste Management Facility Permit issued on August 5, 1991, under the authority of the Resource Conservation and Recovery Act (RCRA), by EPA and the Washington State Department of Ecology ("Ecology") to Chemical Processors, Inc.'s Georgetown facility (now owned and operated by Philip Services Inc.).

The Permit allows Philip Services Inc. ("Philip") to store and treat designated hazardous wastes at its Georgetown facility and requires the company to conduct certain activities to address environmental contamination which has resulted from the historical handling of hazardous waste at the facility. The only modifications being proposed are to Section VII of the permit ("Corrective Action"). These proposed changes are listed in the *Proposed Modifications To the Philip-Georgetown Permit* section (Section V) below.

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## II. FACILITY BACKGROUND

## Facility Description

Please see Attachment A, a "Comprehensive Groundwater Monitoring Evaluation Background Summary Report," prepared for EPA on 10/20/99. Section 2.0 of that Report discusses the Philip facility background.

# **History of Investigations**

The existing permit was issued in 1991 to Chemical Processors Inc. and transferred to Philip when it purchased the facility. Ecology and EPA issued the permit jointly, with EPA having the oversight responsibility for the cleanup process for environmental contamination caused by activities at the facility.

The Comprehensive Groundwater Monitoring Evaluation Background Summary Report (see Attachment A, table A-1 of the Report) identifies a group of critical documents, and EPA's responses to those documents, that comprise a consolidated history of the actions taken since 1989 to investigate contamination from the facility now owned and operated by Philip Services.

In 1998 Philip conducted an off-site Hydropunch study. The intent of the study was to determine what levels of groundwater volatile contaminants existed in areas dowgradient of Philip's existing monitoring wells. The results from this study, results from Philip's quarterly monitoring of groundwater, the results from investigations and computer modeling undertaken in 1999 and 2000, and recent findings from another round of hydropunching, have led to the current conception of the routes and pathways whereby humans and the environment may be exposed to contamination caused by past practices at the facility.

Based on current information, it is EPA's understanding that the groundwater in the two upper aquifers (the "shallow" and "intermediate") has been contaminated to such an extent that it is unsafe to use for drinking water, or other domestic purposes. The precise area over which the contamination has spread is not known. It has been approximated in a 1998 study, however, by a polygon that is bounded by: a) a line extending from S. Bennett Street east to Airport Way; b) Airport Way (at a point in line with the north end of the facility) south to Airport Way and Lucile; c) a line connecting Airport Way and Lucile southwest to 7<sup>th</sup> and Homer; d) a line from 7<sup>th</sup> and Homer to 6<sup>th</sup> and Findlay to the west; and, e) 6<sup>th</sup> Avenue north to Bennett (a figure was

provided of this area at the November 30, 2000, open house). Over most of this area it was concentrations of benzene and vinyl chloride which caused the water to be unsafe to drink.

As noted, recently Philip has undertaken more groundwater investigations. Preliminary results from that work indicate that unacceptable levels of hazardous constituents in groundwater exist at locations as far west as  $4^{\rm th}$  Avenue, and as far southwest as the intersection of  $4^{\rm th}$  and Mead St. Philip continues to move west and southwest with their sampling equipment, and the facility intends to sample next in areas between  $4^{\rm th}$  and 1st.

The current information also indicates there has been some contamination of the deep aquifer. Although currently the deep aquifer appears to only contain levels of hazardous chemicals below health-based action levels (which, for this project, has been a combination of Department of Ecology Model Toxics Control Act (MTCA) A and B levels, non-zero Maximum Contaminant Level Goals (MCLGs), and Maximum Contaminant Levels (MCLs, when MCLGs are not provided, or are set to a value of zero)), cyanide, methylene chloride, TCE, and cis-1,2-DCE, among others, have been detected in the past at concentrations exceeding these levels.

Contamination in the upper two aquifers includes relatively high levels of, primarily, volatile hazardous constituents. Closer to the facility there have also been sampling results showing significant detections of semi-volatiles, metals, cyanide, and PCBs. Not all of these constituents have been detected, or if detected, are at concentrations exceeding action levels, **off-site**. Some have been detected off-site and/or exceed action levels off-site, but are limited in extent to areas immediately downgradient of the facility.

According to Philip's research (which is documented in an early version of the Risk Assessment Work Plan, and which has been supported by questionnaires and door-to-door surveys), no one residing in the contaminated groundwater area described above (based on the 1998 results) is using groundwater as a source of drinking water. This will continue to be the case for the foreseeable future (again, please refer to the Risk Assessment Work Plan regarding a discussion of beneficial use of the near-surface groundwater zones in the Duwamish Valley).

However, contamination in the groundwater may also: (1) continue to migrate downgradient so that it underlies property, presently unknown to EPA, where groundwater is used for some purposes; (2) continue to migrate downgradient

so that it discharges into the Duwamish River, impacting the river's ecology; and/or (3) volatilize, move upward through the soil column, and seep into structures (homes, businesses, etc.), contaminating indoor air. The Comprehensive RFI Report and Corrective Measures Study, required by EPA's draft permit modification, will assess these potential pathways, and quantify the risks associated with them. If EPA and/or Ecology determine that actions must be taken to protect human health and the environment, a Corrective Measure will be selected, and Philip will be required to implement it.

## III. PROCEDURES TO FINALIZE THE PERMIT MODIFICATION

On May 27, 2000, Philip submitted a permit modification request to EPA and began public comment per the requirements for a Class III modification (40 CFR 270.42). Two public meetings were held, in June and August. The public comment period was extended from sixty to ninety days. Once the comment period closed on Philip's modification request, EPA reviewed the request and considered comments received during the public comment period. Based on the review of Philip's request, and the comments submitted, EPA drafted a permit modification per 40 CFR 124.6. EPA's draft permit modification contains some of Philip's requested language, some changes to these proposals, and new language, proposed by the Agency pursuant to 40 CFR 270.41 (EPA-initiated modification). The draft modification is discussed in more detail later in this document.

40 CFR 124.10 requires that the public be given at least forty-five (45) calender days to comment on the draft permit. Comments on this draft permit modification, however, will be accepted for sixty (60) days. The comment period for EPA's Draft Permit Modification begins on January 15, 2001, and ends on March 15, 2001. On February 15, 2001, a public hearing will be conducted by EPA to gather verbal comments from the community.

Philip's current RCRA permit (issued on August 5, 1991), Philip's May 27, 2000, proposed modification, EPA's Draft Permit Modification, a Fact Sheet, and this document shall all be available for public review at the Beacon Hill Library repository. Other documents will also be included at this location. These same documents will additionally be available for the public's inspection at the EPA Region 10 Library at 1200 6<sup>th</sup> Avenue (10<sup>th</sup> floor). Copies of particular documents from EPA's Administrative Record may be requested from EPA Region 10 by contacting Stephanie Kercheval, Freedom of Information Act Coordinator, at (206)553-8665.

Members of the public are encouraged to comment on EPA's Draft Permit Modification. Concerns may be voiced during the public comment period through: a) EMAIL, b) phone conversations with EPA contacts, and c) meeting discussions. Formal communication of comments may be provided to EPA: a) by writing a comment letter or EMAIL to the Agency and/or b) verbally, during the public hearing.

EPA will conduct a public hearing on Thursday, February 15 from 6:30 to 9:30 at the Georgetown Eagles Hall, Aerie #1, 6205 Corson S., Seattle, Washington, to take formal comments on the proposed permit modification.

Please send written comments by March 16th to:

Ed Jones, EPA Project Manager U.S. EPA Region 10, MS: WCM-121 1200 Sixth Avenue Seattle, Washington 98101

or

E-mail to <a href="mailed">: PhilipGeorgetownR10@epa.gov</a>
E-mailed comment should include your name and mailing address.

Once the comment period has expired, EPA will consider all the comments submitted during that period, and issue a Final Permit Modification. At that time EPA shall notify Philip Services, any person who provided written comments on EPA's Draft, and any person requesting such notification, of the Agency's final decision. Unless appealed, the Final Modification will become effective thirty days after serving notice of the decision.

EPA Contact:

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1200 6<sup>th</sup> Avenue
MS: ECO-081
Seattle, WA 98101

Ed Jones (206) 553-1079

# IV. MODIFICATION OF THE EXISTING PHILIP-GEORGETOWN FACILITY PERMIT, SECTION VII.

The Class III comment period closed on August 26, 2000. EPA has reviewed Philip's modification request and comments from the public, and is providing an opportunity to comment for sixty (60) days on the Agency's Draft Permit Modification for the Philip Georgetown facility. Much of the Corrective Action language in Section VII of the existing permit is proposed for modification.

As one of the national "high priority" sites for RCRA Corrective Action, the Georgetown facility is designated as a site that must strive to meet two Environmental Indicators by 2005. To achieve these Indicators Philip must control exposures to individuals who may be currently impacted by contamination from the facility so that the exposures do not result in unacceptable health affects. Philip must also implement measures needed to demonstrate that groundwater contamination is not continuing to travel off-site at unacceptable levels. The Comprehensive RFI Report and Corrective Measures Study will focus, among other things, on whether these Indicators are now being met, will be met by 2005 without any actions, or require Correctives Measures to be achieved.

Section VII of the original permit called for a RCRA Facility Investigation and Corrective Measure Workplan to be submitted to EPA by August 1993. That schedule was not met. The original permit no longer accurately reflects the current conditions at the site, or the corrective action that has taken place.

EPA's proposed modifications update the conditions of the permit to reflect the current conditions at the site, account for new information, and identify the corrective action activities that have been and need to be completed at the site. The modifications will also strengthen the schedule to provide for the timely completion of the corrective action activities. The proposed modifications also provide changes in the permit language in some conditions in order to clarify the requirements of the permit, which will ensure that the work to be completed will address the environmental contamination at the Facility.

The proposed modifications will provide for a schedule that will ensure timely completion of corrective action activities. It will provide for permit requirements that are clear. EPA believes these modification will result in the continued progress of corrective action activities to address the contamination at the facility.

# V. EPA'S PROPOSED MODIFICATIONS TO CONDITIONS IN THE PHILIP GEORGETOWN FACILITY PERMIT.

In the following section the more significant changes are summarized and supported; less significant changes are briefly noted. The reader is referred to Philip's May 27, 2000, permit modification request, and EPA's January 15, 2001, Draft Permit Modification, for the actual proposed language per modification.

## \*Permit Conditions #VII.A through A.3.

Philip's request: No changes.

**EPA's proposal:** No changes to A or A.1. Existing A.2. is moved to A.11; this is not a substantive change to the permit. Existing A.3. is moved to A.12; this is not a substantive change. In the draft modification, A.2. is now a list of critical definitions. A.3. now contains requirements for conducting the RFI.

Statement of Basis: No changes have been proposed by EPA to existing A.2. and A.3., other than moving the conditions to new locations. New A.2. and A.3. are needed, respectively, because: (1) a relatively large number of changes have been proposed by Philip (initially) and by EPA in the draft permit modification. It is not obvious, in some cases, how new terms differ from one other, and how EPA intends the terms to be understood; and, (2) since the issuance of the 1991 permit, new RFI work elements have become necessary to fully characterize contaminated media and the risks to human health and the environment. A.3. clarifies these outstanding work elements, and requires them to be completed as approved in work plans and scopes of work. For example, although it was not known in 1991 that residences and businesses downgradient from Philip had been impacted by facility releases into groundwater, this is now known to be the case, and in order to protect human health, A.3. is proposed to contain a notification requirement to these off-site property owners.

## Permit Condition #VII.A.4.

Philip's request: Change the RFI introduction section to a listing of completed RFI tasks.

**EPA's proposal:** Philip's proposal is denied. A.4. is changed from "RFI Introduction" to "RFI Report," and EPA inserts modified language proposed by Philip at

#### A.5.

Statement of Basis: EPA agrees with Philip that existing A.4., "RFI Introduction," is no longer needed since the actual requirements provided in this paragraph are contained in other Section VII.A. conditions. Philip has, however, proposed unnecessary language for inclusion into the permit at this location. Most of Philip's listed documents do not constitute, or contain tasks which constitute, actions to be performed by the Permittee.

EPA proposes that A.4. now be the location for RFI Report requirements (a modification of Philip's proposed A.5. and the existing permit's conditions A.8 and A.9.). EPA's new language is needed for the reasons described in condition VII.A.5. below.

# \*Permit Condition #VII.A.5.

Philip's request: Delete the existing language concerning a Final Off-site Workplan, and replace it with requirements for the Comprehensive RFI Report.

EPA's proposal: EPA proposes that A.5. now be the location for a modification of the existing condition A.6., "Amendments to Off-site RFI Workplans." EPA proposes to keep the first two sentences of existing A.6., and add language requiring amendment work plans to follow the usual steps of draft and final, with EPA comments on the draft and approval/disapproval of the final.

With respect to Philip's A.5. proposal, proposed by the Agency to be placed in A.4., EPA:

- a) made some minor changes to the introduction under RFI Report;
- b) made some minor changes to a) (1);
- c) made some minor changes to a) (2);
- d) made some minor changes to a) (3);
- e) moved Philip's eighth bullet into a) (4), and made some minor changes to it;
- f) moved Philip's ninth bullet into a) (5), and made a strictly editorial change to it;

- g) moved Philip's fourth bullet into a)(6), and made some minor changes to it;
- h) moved Philip's fifth bullet into a) (7) and modified Philip's definition of the point of compliance;
- i) moved Philip's sixth bullet into a)(8) and made some minor changes to it;
- j) moved Philip's seventh bullet into a) (9) and made some minor changes to it, as well as adding language requiring the Permittee to propose Environmental Indicator determinations. In addition, EPA has proposed to keep the existing Table IV in the permit;
- k) made minor changes to Philip's tenth bullet (now a)(10));
- 1) made minor changes to Philip's eleventh bullet (now
  a) (11));
- m) made a minor change to Philip's twelfth bullet (now a)(12));
- n) added new language at a) (13) requiring the submittal of a Community Relations Plan;
- o) added new language at a) (14) requiring the submittal of a CMS Scope of Work technical memorandum;
- p) added new language at a) (15) requiring Philip to discuss the location of their record storage in the draft Comprehensive RFI Report;
- q) added new language concerning the submittal of a corrective action cost estimate; and,
- r) added new language concerning off-site propertyowner notification.

Statement of Basis: EPA agrees that existing A.5. is outdated and should be deleted. The condition refers to a July 30, 1990, Workplan that was approved final with modifications, and the tasks in that Workplan have either been completed or, if judged by EPA to still require completion, are the subject of newer plans.

With respect to Philip's A.5. proposal, which is the basis of EPA's A.4. proposal, mostly minor changes were made to improve clarity and enforceability. The Agency also changed the wording describing the point of

compliance to better reflect the notion of the compliance point being "throughout the plume," wherever remedial action levels will need to be met. This improves the definition's clarity and enforceability.

EPA also brought the new (since the existing permit was issued) concept of Environmental Indicators into the permit. Since these two Indicators must be considered when determining the need for actions, it is worthwhile for the Permittee to evaluate them as part of the preparation of the RFI Report. In addition, EPA proposes to keep existing Table IV (groundwater cleanup standards) in the permit. The RFI Report is required to consider the values in Table IV when proposing remedial action levels/objectives.

The Agency also added a requirement for a Community Relations Plan. Though not a requirement of the 1991 permit, the need for such a document was well demonstrated by the significant community and media attention directed to this permit modification since July of 2000.

Though Philip and EPA had discussed the desirability of a CMS Scope of Work technical memorandum in meetings, this document was not proposed by Philip in their modification request. EPA believes this document will aid the parties in ensuring that the CMS and the CMS Report are properly focused. Since no existing RFI plans have included this information, the technical memorandum should be required.

EPA is also requiring Philip to briefly discuss their record storage location and measures they use to keep that area secure and maintained. The Agency is proposing this because the Philip-Georgetown Corrective Action file has now, nine years after the permit was issued, become very large and EPA wants to ensure that the potential for lost data and documents is minimized.

In addition, the Agency is proposing to require Philip to submit a cost estimate to complete corrective action at the site. The estimate will serve as the basis for requirements later in the permit for financial assurance. Since 1991 this has become a standard requirement in permits that require corrective action.

Finally, EPA is proposing to require Philip to notify neighbors who own property atop groundwater contaminated by the facility. Such requirements were not contained in the 1991 permit because it was not

known at that time that such off-site properties were being affected. This requirement is needed to help protect human health.

EPA proposes that A.5. now be the location for a modification of the existing condition A.6. Changes to existing A.6. have been proposed to better follow the draft modification's usual steps of draft and final document submissions, with EPA comments on the draft and approval/disapproval of the final.

## Permit Condition #VII.A.6.

Philip's request: Move A.10., <u>RFI Progress Reports</u>, from the existing permit into this location. Move existing A.6., in part, into Philip's A.4.

**EPA's proposal:** EPA has moved A.10. to draft condition A.7. Existing A.6. is proposed to be included into A.5. EPA proposes to insert modified language from condition A.7. into A.6.

**Statement of Basis:** New A.6., the existing A.7., was only changed in a minor way to improve readability. Existing A.6., inserted into EPA's draft A.5., was not substantively changed.

# Permit Condition #VII.A.7.

**Philip's request:** Delete existing A.7. and add the substance of this condition into A.4.

**EPA's proposal:** Move existing A.7. to A.6. (as noted above). Place modified language from A.10. at this location.

**Statement of Basis:** A.7. has been moved to condition A.6. Existing A.10. is proposed to be moved to this location. Only minor, editorial, changes were made to existing A.10.

## \*Permit Condition #VII.A.8,

Philip's request: Delete the existing condition, it has been moved forward in the permit (into the condition requiring a Comprehensive RFI Report).

**EPA's proposal:** Delete condition as requested. Insert new language concerning corrective action record storage.

Statement of Basis: The new language EPA has proposed to be inserted into A.8. recognizes that the amount of investigation and monitoring related information that has become available since permit issuance is immense, and is intended to ensure that significant records are kept throughout the Corrective Action period.

Existing A.8. (requirements for a Draft Off-site RFI Report) is no longer needed in the permit, since it has been replaced by requirements in A.4. for a Draft (and Final) Comprehensive RFI Report.

# \*Permit Condition #VII.A.9.

Philip's request: Delete the existing condition, it has been moved forward in the permit (into the condition requiring a Comprehensive RFI Report).

**EPA's proposal:** Delete condition as requested. Insert new language concerning a corrective action operating record.

Statement of Basis: The new language EPA has proposed to be inserted into A.9. establishes a requirement for a corrective action operating record. This is not a new requirement, since the Permittee can continue to use the existing facility operating record for this purpose. The requirement allows Section VII conditions to reference an operating record contained in that section (i.e., in the Section that EPA oversees).

Existing A.9., requirements for a Final Off-site RFI Report, are obsolete. Proposed A.4. now contains requirements for a (Draft and) Final Comprehensive RFI Report.

# \*Permit Condition #VII.A.10.

Philip's request: Delete the existing condition, it has been moved forward in the permit (into Philip's A.6. condition, requiring RFI Progress Reports).

**EPA's proposal:** Move condition to A.7. instead of A.6. Insert new language at A.10. concerning the identification of new SWMUs.

Statement of Basis: There is no substantive change proposed to the language in existing A.10.; it has only been moved to A.7. The new language EPA has proposed to be inserted into A.10. concerns actions Philip must take after discovering new solid waste management units

(SWMUs) at the facility. Since Philip is responsible for releases emanating from on-site SWMUs, it is appropriate that the facility make known all newly identified units or previously identified units that appear to be, or have the potential to be, newly releasing. This is a standard EPA corrective action permit condition.

## Permit Condition #VII.A.11.

Philip's request: No proposal.

**EPA's proposal:** Move existing condition A.2. to this location.

**Statement of Basis:** There is no substantive change proposed to the language in existing A.2.; it has only been moved to condition A.11. The permit does not currently contain an A.11.

#### Permit Condition #VII.A.12.

Philip's request: No proposal.

**EPA's proposal:** Move existing condition A.3. to this location.

**Statement of Basis:** There is no substantive change proposed to the language in existing A.3.; it has only been moved to condition A.12. The permit does not currently contain an A.12.

# Multiple Permit Conditions

Philip's request: Changes to the language concerning document approval are proposed so that it is clearly understood that Philip submits draft documents to EPA; EPA then approves those documents as they are, or disapproves them with comments, or approves them with modifications; and, that if the drafts have been disapproved, Philip must then submit a final document, satisfactorily addressing EPA's comments.

**EPA's proposal:** EPA agrees, but has proposed modifications to Philip's request.

Statement of Basis: EPA has accepted parts of Philip's request, and made additional modifications, to provide a clear and enforceable submittal/approval process, and to potentially shorten the time period between submittal of a draft and approval of a final by EPA.

EPA has modified the requested language to make it clear that if a revised document fails to satisfactorily address EPA's comments on the draft, that this will be considered a permit violation. In addition, extra language clarifies what EPA's options are following the submittal of the revised document.

## \*Permit Condition #VII.B.

Philip's request: Add some additional language to this condition concerning the purpose of the Pre-Corrective Action Monitoring Plan.

**EPA's proposal:** Move some of Philip's proposed language to the attachment containing historical documents. Deny other parts of the request. Add new language (one sentence) concerning the Pre-Corrective Action Monitoring Program.

Statement of Basis: Since the permit was issued, a Pre-Corrective Action Monitoring Plan has been approved (1992). The new language notes this. Portions of Philip's language is denied because they relate to historical actions and not to requirements the Permittee is (or is still) obligated to comply with.

## Permit Condition #VII.B.1.

**Philip's request:** Modify existing B.1. to add some requirements of the draft Pre-Corrective Action Monitoring Plan.

EPA's proposal: Move some of Philip's proposed language to Attachment NN, but deny portions of their proposal. Modify the language somewhat in Philip's B.1.g) and h), combine the two, and make them the new B.1.

Statement of Basis: Since the permit was issued, a Pre-Corrective Action Monitoring Plan has been approved (1992). Therefore, the requirement for a Plan to be submitted is no longer needed. Philip's proposed B.1.g) and h) remain current requirements and are therefore retained at this location. Portions of Philip's proposed language is denied because they relate to historical actions and not to requirements the Permittee is (or is still) obligated to comply with.

EPA proposes to make a minor modification to G.3. and insert the language concerning quality-assured data submissions into B.1. This brings the requirements for

data submittal into the monitoring section (rather than forcing the reader to refer to them).

# Permit Condition #VII.B.2.

Philip's request: Modify existing B.2. to bring it up to date.

**EPA's proposal:** Move Philip's proposed language because it refers to a Plan that has already been finalized to Attachment NN. Move language from existing VII.I.2. to B.2., and modify it so that it refers to PQLs, not cleanup standards.

Statement of Basis: Since the permit was issued, a Pre-Corrective Action Monitoring Plan has been approved (1992). Therefore, the requirement for a final plan is no longer needed.

Language from I.2. is proposed for this condition so that individual sections (B, E, and F) have their own specific groundwater monitoring requirements concerning groundwater detections (and in this case, comparisons to PQLs).

EPA also proposes to allow Philip to keep inorganic constituents off the monitoring analyte list if their levels in groundwater are in the range of background, and are below approved screening levels.

# Permit Condition #VII.B.3.

Philip's request: Modify existing B.3. to state that the Pre-Corrective Action Monitoring Plan is retired once the Corrective Measure Monitoring Plan is approved and implemented.

**EPA's proposal:** Philip's proposed language is substantively included in EPA's proposed condition B. New B.3. is a modification of existing I.3.

**Statement of Basis:** Language from I.3. -- with only minor modifications -- is proposed for this condition so that Section B has its own requirements concerning groundwater verification sampling during Pre-Corrective Action monitoring.

## \*Permit Condition #VII.B.4.

Philip's request: no proposal (there is no B.4. in the

existing permit)

**EPA's proposal:** EPA proposes the addition of a condition B.4. to explain how modifications to the Pre-Corrective Monitoring program must proceed.

Statement of Basis: These newly proposed requirements, needed now since the initially-approved Plan is eight years old and modifications will be in order, improve the clarity and enforceability of the permit language. The existing permit envisaged that the Pre-Corrective Action Monitoring Plan would be retired (in favor of a Corrective Action Monitoring Plan) in the mid 1990's.

## \*Permit Condition #VII.C.

Philip's request: No changes to the existing permit.

**EPA's proposal:** New language has been developed for this condition, dealing with Interim Measures. Requirements are listed under C. that describe what conditions trigger submittal of an Interim Measures Work Plan. Existing condition C. is just a heading.

Statement of Basis: The newly proposed language, some of which comes from Philip's proposed C.1., also makes reference to attainment of Environmental Indicators as a cause for implementing measures. As noted above, these Indicators were not defined in 1991 when the permit was issued. This is new information and a permit change is needed because recently EPA has committed to Congress that the Indicators be attained within a short timeframe. The Permittee must be considering measures to meet this commitment well before implementation of the final Corrective Measure.

## Permit Condition #VII.C.1.

Philip's request: Change the existing permit language to make it more consistent with other Philip permits, and make it obviously targeted for <u>future</u> situations that may develop where Interim Measures must be considered.

**EPA's proposal:** EPA agrees with the direction of Philip's proposal. EPA has modified Philip's proposed language to expand the introductory section, retain existing VII.C.1.b), and add requirements for updating Monitoring Plans, if needed.

EPA (and Philip) also propose to remove existing

Interim Measure language concerning "justification" letters as alternatives to Work Plans.

Statement of Basis: EPA's newly proposed language, most of which is a combination of the existing C.1. language and Philip's proposed C.1., improves the list of needed elements for a draft Interim Measure Work Plan. These changes were needed to properly respond to environmental conditions that must be acted upon expeditiously. EPA has proposed condition C.1.f) so that it is clear that Philip must consider what monitoring, or changes in monitoring, will be needed at the time of Interim Measure Work Plan submission.

## Permit Condition #VII.C.2.

Philip's request: Change the existing permit language to make it more in keeping with Philip's Interim Measure language at another of its permitted facilities, and make it obviously targeted for <u>future</u> situations that may develop where Interim Measures must be considered. Move existing C.3. into this condition.

**EPA's proposal:** EPA denies Philip's request to move C.3. EPA proposes modest modifications to the rest of Philip's proposal.

Statement of Basis: The new language improves the clarity and enforceability of the draft document-to-final document permit language. EPA's newly proposed additions to Philip's proposal clarify when a substandard document submission becomes a permit violation and what options EPA has in approving or disapproving a revised document.

## Permit Condition #VII.C.3.

**Philip's request:** Move existing C.3. into C.2. Insert requirements for Interim Action Progress Reports into C.3.

**EPA's proposal:** Philip's request is denied. EPA proposes to keep existing C.3. at its present location, and makes several minor modifications.

**Statement of Basis:** The new language expands existing C.3. so that it is clear that the Permittee shall operate and maintain the measure per the approved Work Plan.

## Permit Condition #VII.C.4.

**Philip's request:** Add a new condition entitled <u>Previous</u> Implementation of Interim Measures.

EPA's proposal: EPA proposes to deny most of Philip's proposed C.4., since this language describes historical actions/documents and does not contain tasks to be carried out pursuant to permit compliance. The Agency proposes to replace this language with requirements for Philip's currently operating Interim Measure (a soil vapor extraction system).

Statement of Basis: The existing permit has no condition C.4. EPA proposes to include requirements for the continued operation of the system (as well as reasons why the system could be discontinued) at this condition location. The Interim Measure referred to in this condition had not been designed and was not in operation in 1991 at the time the permit was issued.

## Permit Condition #VII.C.5.

Philip's request: No proposal.

**EPA's proposal:** EPA proposes new language to require periodic evaluations of all operating interim measures.

Statement of Basis: There is no condition C.5. in the existing permit's Section VII. The new language proposed by EPA for C.5. requires that Philip evaluate the performance of their Interim Measure operations annually. This requirement is intended to protect human health and the environment from any failures, or below-specification operation, of the measure(s) that might not otherwise come to EPA's attention. New information (since the permit was issued) has come to EPA's attention regarding problems, and the potential for undesirable emissions, from Philip's Interim Measure SVE system's catalytic oxidation unit.

## Permit Condition #VII.C.6.

Philip's request: No proposal.

**EPA's proposal:** EPA proposes language to require interim measure progress reports. In the proposal the frequency of progress reports is established in the final, approved, Interim Measure Work Plan.

**Statement of Basis:** The new language proposed for C.6. is primarily Philip's proposal (for C.3.), but is

modified by EPA so that the frequency of report submittals can be determined for the specific measure implemented. This change is needed because EPA expects that some interim measures will require frequent progress reports, especially at the beginning of their operation, while others may require relatively infrequent progress accounts.

# \*Permit Condition #VII.C.7

Philip's request: No proposal.

**EPA's proposal:** EPA proposes language to require that evaluations and progress reports be submitted to the Agency, and that the usual process of proposal (, revision,) and approval will govern their acceptability.

Statement of Basis: EPA's proposal clarifies to Philip, and to the public, that progress reports and evaluations of interim measures will be subject to the Administrator's approval. The existing permit, issued in 1991, gave the facility the option of implementing interim measures, or preparing and submitting a "justification" for why such measures were not needed. Since that time interim measures have been implemented, and may be implemented again in the future. Requirements must be place, therefore, to allow EPA to review the progress and effectiveness of such measures, and ensure that Philip meets the permit's requirements for these reports and evaluations.

## \*Permit Condition #VII.D.

Philip's request: No changes.

EPA's proposal: Insert a single sentence in the heading to this section, describing the purpose of the Corrective Measures Study (since D.1., the first condition, begins with requirements for the Corrective Measures Study Report, proposed by Philip, which is prepared after the Study is completed.

**Statement of basis:** This proposed addition to the permit clarifies that a Corrective Measures Study must be performed prior to Philip's proposed preparation and submission of a Corrective Measures Study Report.

## Permit Condition #VII.D.1.

Philip's request: Move the existing condition D.1. to

D.7. Insert requirements for a draft CMS here.

EPA's proposal: EPA agrees with Philip that requirements for a draft CMS Report should be placed at D.1. EPA modifies Philip's proposal in two significant ways: 1) the Agency changes Philip's introductory paragraph so that it is clear that the CMS will study alternatives which can meet remedial action levels/objectives based on risk reduction as well as other objectives (such as restoration of groundwater quality in keeping with its highest beneficial use); and, 2) the Agency adds attainment of Environmental Indicators to the balancing criteria for judging remedial alternatives.

Statement of Basis: Philip's proposal is a significant improvement over the existing permit. EPA's additional proposed requirements introduce the priority of Environmental Indicator attainment into the permit, new information since the permit was issued, and add requirements to Philip's requirements for the study that are needed to better achieve optimal Corrective Measure selection.

# Permit Condition #VII.D.2.

**Philip's request:** Move the existing condition to D.8. Insert requirements for a final CMS Report here.

**EPA's proposal:** EPA agrees with Philip that requirements for a final CMS Report should be placed at D.2. EPA only modifies Philip's proposal editorially. Existing D.2., concerning finalizing a "Corrective Measures Workplan," is modified and integrated into EPA's proposed D.7.

Statement of Basis: EPA agrees with Philip that a final CMS Report should be submitted, evaluating prospective remedial alternatives. No substantive changes have been made to Philip's request in EPA's first paragraph. The second paragraph is newly proposed by the Agency to clarify to the public and Philip that remedial action levels and objectives, like the preferred remedy, are not fully approved by EPA until public comment on the Corrective Measure permit modification has ended and the agencies have finalized the modification.

## Permit Condition #VII.D.3.

Philip's request: Add a new condition to Section VII.D. describing the requirements for permit

modification once the Permittee has chosen a preferred Corrective Measure.

**EPA's proposal:** EPA agrees to this addition, but modifies Philip's proposed conditions D.3. and D.4.

**Statement of Basis:** There is no D.3. in the existing permit.

Regulations in 40 CFR 270.41 and 124 will govern the permit modification public participation process referred to in this new condition. EPA has changed Philip's request so that the remedy selection modification is agency-initiated; this approach is consistent with similar Corrective Measure permit modifications processed in Region 10, and often results in a faster finalization of the modification.

## Permit Condition #VII.D.4.

Philip's request: Add a new condition to Section VII.D., describing the requirements for public participation once the Permittee has initiated a permit modification request.

EPA's proposal: EPA agrees with some of this proposed language, but has included it in condition D.3. Philip's request for D.4. is therefore denied. EPA's proposed D.4. is a condition with requirements for a "Draft Corrective Measure Design and Implementation Scope of Work," Philip's proposed D.5.

Statement of Basis: There is no existing D.4. EPA's new draft language at D.4. is a modification to Philip's proposed D.5. The Scope of Work document, required by EPA's draft modification to the permit and also proposed by Philip, is intended to improve the focus of the subsequent draft Corrective Measures Work Plan.

# Permit Condition #VII.D.5.

**Philip request:** Add a condition describing the requirements for a post-remedy selection, Corrective Measure Scope of Work.

EPA's proposal: As noted above, EPA agrees with this addition. Philip's proposed language has been only modestly modified, and placed at D.4. The changes from Philip's request include, e.g., the addition of language describing the submitted project schedule as a

critical-path, time-critical schedule, showing the dependence of deliverables on preceding actions and documents. EPA proposes requirements for a "Final Corrective Measure Design and Implementation Scope of Work" at D.5.

Statement of Basis: The existing permit does not contain a D.5. The new language at D.5. is a modification to Philip's proposed D.6. condition, finalizing the draft scope of work. The changes EPA has proposed to Philip's D.6. clarify the Agency's expectations for the Scope of Work's contents.

## \*Permit Conditions #VII.D.6. and 7.

Philip request: Add two new conditions, one finalizing the scope of work and one listing requirements for a draft, post-remedy selection Corrective Measure Work Plan.

EPA's proposal: EPA agrees with these proposals, but as noted above, Philip's proposed D.6. has been modified and placed at D.5. Philip's proposed D.7. language has been modified so that the draft Work Plan is also required to contain: inclusion of Environmental Indicator attainment as part of the remedial action objectives; a corrective measure monitoring plan, if needed, for any media other than groundwater; a Construction QAP; an O&M Plan; a health and safety plan; a waste management plan; field procedures; inclusion of any additionally needed Corrective Measure progress reports in the project schedule; and, Corrective Measure Completion Criteria (including a working definition of "adequate progress"). In addition, EPA has taken the list of Philip's proposed documents for later submission and put them into the requirements of the Work Plan.

Philip's D.7. is placed at condition D.6. in EPA's draft modification.

EPA proposes that D.7. contain requirements for finalizing the Work Plan (a modification of Philip's proposed D.8.).

Statement of Basis: The existing permit does not contain conditions D.6. and D.7. Philip's proposal, listing the critical elements for such a Work Plan, is a significant improvement over the current permit. EPA's draft language improves the clarity and enforceability of this requirement.

Philip's D.7. has been proposed for modification by EPA. As noted above, Environmental Indicators must now be considered by EPA in approving Corrective Measures; inclusion of them into the permit makes this consideration into a formal requirement. A monitoring plan for media other than groundwater could be necessary at this juncture (for example, recent RFI findings have indicated a need for soil gas monitoring); therefore, a requirement is added.

A Construction QAP, a health and safety plan, an O&M Plan, and a waste management plan are required elements of most remedial designs, and should be noted as requirements in the permit. Progress reports for Corrective Measure implementation and operation are necessary for both EPA and the public to keep abreast of cleanup developments; the finalization of the Work Plan is the best time to determine if such submittals should be submitted more frequently than the schedule required by proposed D.10. Completion Criteria must be contained in the Work Plan so that it is clear to Philip, EPA and/or Ecology, and the public, what constitutes a successful Corrective Measure completion.

Finally, in certain cases the documents proposed by Philip for later submission (design drawings, specification packages, waste management plans, e.g.) should be submitted at the same time as the draft Work Plan. If the nature of the selected Corrective Measure(s) is such that some of these documents are best submitted later than the Work Plan, it is EPA expectation that the remedy-selection permit modification will adjust these submittal dates accordingly.

# \*Permit Condition #VII.D.8.

Philip request: Add new language identifying the requirements for finalizing the Final Corrective Measures Work Plan.

**EPA's proposal:** EPA has modestly modified this language and placed it at D.7. EPA proposes that D.8. contain requirements for implementing the Corrective Measure(s) per the approved Work Plan.

Statement of Basis: There is no condition D.8. in the existing permit. The new language at D.8. is intended to ensure that approved procedures and actions in the Work Plan are carried out during Corrective Measure design, construction, start-up, and operation.

Philip's modification request was silent about implementation of the Work Plan.

# \*Permit Condition #VII.D.9.

Philip request: No proposal.

**EPA's proposal:** EPA proposes to add new language requiring that a third-party specialist be engaged by the Permittee to certify the Corrective Measure(s) suitability for operation.

Statement of Basis: This requirement ensures EPA and the public that the remedial action, or actions, will be designed and constructed according to plan, and will be ready to operate per its designed, operating specifications. Such certifications are standard following the completion of Corrective/Remedial Measure construction.

## Permit Condition #VII.D.10.

Philip's request: No proposal.

**EPA's proposal:** EPA proposes to add a new condition calling for progress report submittal, and a determination of whether the Corrective Measure is achieving "adequate progress." This is a modification to Philip's proposed E.2.

Statement of Basis: Most of EPA's proposal comes from language in other locations (of the existing permit), but it is intended to make clear that the Corrective Measure progress will be tracked, and that failure to achieve adequate progress at each interval will initiate a consideration of solutions to the problem.

## Permit Condition #VII.D.11.

Philip's request: No proposal.

EPA's proposal: Adds a new condition under the heading of <u>Determination of Corrective Measure Completion</u>. This proposal is a modification of the existing permit's H.2. and Philip's proposed E.3. The condition describes the requirements in determining if the Corrective Measure system -- to the extent this applies -- can be discontinued, and what actions follow such an approved determination.

Statement of Basis: EPA has proposed this condition to

better articulate what steps follow the determination that any active Corrective Measure, or portion of a measure, may be discontinued. New, proposed, EPA language clarifies the requirement that commencement of Compliance Monitoring for media other than groundwater may be needed at this time.

## Permit Condition #VII.E.

**Philip request:** Modify the existing language so that it refers to Corrective *Measure*, not "Action," Monitoring.

**EPA's proposal:** EPA agrees with Philip that this change in nomenclature is appropriate. The Agency proposes, however, to shorten condition E. to only a heading, and title the heading "Groundwater Corrective Measure Monitoring Plan."

Statement of Basis: This is only an editorial change to the permit.

## Permit Condition #VII.E.1.

Philip request: Modify the existing language to update it, and add language from Section G to improve the comprehensiveness and clarity of the condition.

**EPA's proposal:** The Agency proposes few modifications to Philip's proposal. EPA adds a bullet requiring that the Plan contain a discussion and listing of criteria for how the Permittee shall determine when remedial action objectives/levels have been met.

Statement of Basis: The existing language concerning the monitoring of groundwater to determine reversal of flow and capture zones may not be relevant to the eventually selected Corrective Measure. As EPA makes clear in draft conditions A.4.9. and D.6.b., however, achieving the Environmental Indicator related to controlling plume migration, and monitoring to ensure control, is a permit requirement. Deleting the existing language about capture zones makes it clear that EPA is not prescribing a pump-and-treat Corrective Measure. The new language gives Philip the flexibility to propose in the Corrective Measure Monitoring Plan -submitted after the Agencies have selected the Corrective Measure and approved remedial action objectives -- well locations and configurations that best meet the performance objectives of the particular remedy chosen for the site.

EPA also proposes that a Quality Assurance Plan (QAP), specific to Corrective Measure monitoring, accompany the Monitoring Plan. QAPs are an essential element of all EPA-approved sampling and monitoring plans, and this new requirement makes it clear that one will be prepared and submitted along withe the Corrective Measure Monitoring Plan.

Philip's proposed E.1.i. and E.1.j. are placed in EPA's proposed conditions E.3. and E.4. This change was made because EPA believes these requirements to relate more to data submittal than the Monitoring Plan (the subject of EPA's E.1.).

#### \*Permit Condition #VII.E.2.

**Philip request:** Add a new condition -- based on the existing permit's H.1. -- requiring Groundwater Corrective Measure Progress Reports.

**EPA's proposal:** The Agency has proposed much of this new language in condition D.10. EPA's new E.2. requires actions to be taken in the event the Corrective Measure Monitoring Plan needs to be modified.

Statement of Basis: The existing permit does not contain a condition E.2. EPA believes that Philip's proposed condition is better presented under "Corrective Measures" than under "Groundwater Corrective Measure Monitoring." Language concerning modification of the Plan will improve the clarity and enforceability of Section E., which currently does not contain procedures for Plan modification.

## Permit Condition #VII.E.3.

Philip request: Place language into this new condition from Section VII.H., regarding determining completion of groundwater Corrective Measure monitoring.

**EPA's proposal:** The Agency has proposed much of this new language in condition D.11., so Philip's E.3. is denied and not included in the Draft Permit Modification. EPA's proposed E.3. is Philip's proposed E.1.i).

Statement of Basis: The existing permit does not contain an E.3. Existing G.6. (Philip's proposed E.1.i.) has been moved by EPA into E.3. so that the reader does not need to refer to section G. This is

consistent with Philip's request (for E.1.i.).

#### Permit Condition #VII.E.4.

Philip request: no proposal.

**EPA's proposal:** EPA's proposed E.4. is Philip's proposed E.1.j).

**Statement of Basis:** There is no E.4. in the existing permit. This general requirement for data submittal (from G.6.) has been placed in this section to improve the comprehensiveness of section E. This is consistent with Philip's request (for E.1.j.).

#### Permit Condition #VII.F.

Philip's request: Do not include a VII.F.

**EPA's proposal:** Modify Philip's F.1. proposal to call for Compliance Plan implementation following completion of the groundwater component of the Corrective Measure, and move it to this location.

Statement of Basis: The existing permit's F. is simply a heading. Including language at this location, describing the purpose of Compliance monitoring, better clarifies the expectations for the draft Plan. EPA's proposed change is consistent with the existing permit and Philip's F.1. request.

## Permit Condition #VII.F.1.

Philip's request: Change the existing condition F., which is basically a heading, to include language clarifying the purpose of this monitoring. Then move this edited language to F.1.

**EPA's proposal:** EPA proposes to modify Philip's F.2. proposal so that the condition indicates when the Plan must be submitted, and notes that the Plan is required to include a description of the circumstances which are cause for closing the Corrective Measure. Then, this modified language is inserted into F.1. Philip's proposed F.2.g) and h) are proposed as conditions F.6. and F.7., respectively.

Statement of Basis: EPA's new language -- based on Philip's F.2. proposal - focuses on compliance with groundwater contaminant cleanup levels still, in part, to be determined (during the remedy selection permit

modification process).

Though EPA does not propose to delete them, many of the cleanup levels in the existing permit's Table IV are outdated. In addition, they embody an assumption in many cases that the cleanup levels will be indexed to a residential drinking water risk of 1E-6 per contaminant. They also are not adjusted to protect ecological receptors, or human receptors exposed to groundwater contaminants after those contaminants volatilize into the soil column, and infiltrate structures, potentially causing indoor inhalation risks. Moreover, based on what is now known about the site, the list of cleanup levels is not comprehensive.

Each step of the corrective action process will identify contaminants of concern and acceptable levels of those contaminants. At each step the list will be refined. During remedy selection (which includes the opportunity for public participation in the decision), the Agencies will have the flexibility to set cleanup levels based on the latest toxicological information, and the exposure pathways and risk levels that are most appropriate. It is EPA's expectation that the permit's groundwater cleanup levels will be analyzed and modified as necessary at the time the permit is modified to select a Corrective Measure.

Philip's proposed F.2.g) and h) are proposed as conditions F.6. and F.7. because these requirements relate to data submittals and not the contents of the Monitoring Plan.

#### Permit Condition #VII.F.2.

**Philip's request:** Modify the existing condition at F.1. so that it is clear that Compliance monitoring is intended to show that remedial action objectives are met at the wells being sampled. Then move this modified language to F.2.

**EPA's proposal:** Modify Philip's F.3. proposal, itself a modification of existing I.1., to require compliance monitoring results to be compared to Corrective Measure remedial action levels. Then move this language to F.2.

Statement of Basis: The existing permit does not contain a condition F.2. EPA proposes to eliminate Philip's proposed "risk based" remedial levels language (in Philip's F.3.), and then move the rest of that

paragraph into F.2. Actual remedial action levels may not all be directly risk-based.

# Permit Condition #VII.F.3.

**Philip's request:** Modify the existing condition at I.1. and place it at this location.

**EPA's proposal:** Modestly modify Philip's F.4. proposal, itself a minor modification of existing I.2., and place it at F.3.

Statement of Basis: There is no F.3. in the existing permit. EPA's proposed change -- referring to remedial action levels instead of risk-based levels -- is not a significant modification to the permit. The change to I.2. is needed because Table IV's clean-up standards are known at this time to not be exhaustive, and in certain cases are outdated; the change to Philip's proposed F.4. is needed because there is the possibility that certain remedial action levels will not be strictly risk-based.

# Permit Condition #VII.F.4.

Philip's request: Modify the existing condition at I.2. and place it at this location.

**EPA's proposal:** Modestly modify Philip's F.5. proposal, itself a minor modification of existing I.3., and place it at F.4.

Statement of Basis: There is no F.4. in the existing permit. EPA's proposed changes to Philip's proposals -- removing "risk-based' from remedial action levels, triggering actions based on a single verification detection (above remedial action levels), and deletion of the option of proposing an alternative strategy -do not constitute a significant modification to the permit. The change to I.3. is needed because Philip's groundwater data should be compared to remedial action levels, not simply the Table IV values (a subset of the remedial action levels). The change to Philip's proposed F.5. is needed because it is EPA's position that if one of the two verification sample shows a concentration in excess of remedial action levels, sufficient evidence is in hand to indicate a remedial failure, and a need that some element of the Corrective Measure should be re-implemented. Philip's proposal for an alternative strategy option need not be contained in the permit. This option is available to

the Permittee in the form of a permit modification request.

## Permit Condition #VII.F.5.

**Philip's request:** Modify the existing condition at I.3. and place it at this location.

**EPA's proposal:** Modify Philip's F.6. proposal, itself a modification of existing I.5., and place it at F.5.

Statement of Basis: The existing permit does not contain a condition F.5. No significant modification to the permit has been proposed by EPA. Time intervals -- "three years" and "four quarterly sampling events", e.g. -- from the existing permit have been retained.

EPA's proposed change is not a significant modification to the permit. The change to Philip's proposed F.6. is needed because the monitoring time intervals proposed for deletion are consistent with other Region 10 permits.

#### Permit Condition #VII.F.6.

**Philip's request:** Modify the existing condition at I.5. and place it at this location.

**EPA's proposal:** EPA has modified and placed Philip's proposed F.6. language at F.5. EPA's proposed F.6. is Philip's proposed F.2.q).

Statement of Basis: The existing permit does not contain a condition F.6. Existing G.6. (Philip's F.2.g)) has been moved by EPA into draft F.6. so that the reader does not need to refer to section G. This requirement is not included in the condition listing the contents of the Monitoring Plan because it relates to data submittals and not the contents of the Monitoring Plan.

#### Permit Condition #VII.F.7.

Philip request: none.

**EPA's proposal:** EPA's proposed F.7. is Philip's proposed F.2.h).

**Statement of Basis:** The existing permit does not contain an F.7. The general, G.6. requirement for data submittal has been proposed for placement in this

section to improve the comprehensiveness of section F. It is not included in the condition listing the contents of the Monitoring Plan because it relates to data submittals and not the contents of the Monitoring Plan.

## Permit Condition #VII.G.1.

**Philip's request:** Modify the existing condition at G.1.

EPA's proposal: Make minor modifications to Philip's proposal.

Statement of Basis: The change will allow Philip to use methods other than SW-846, if approved by EPA.

# Permit Condition #VII.G.2.

Philip's request: No changes.

**EPA's proposal:** Make minor modifications to Philip's G.2.

**Statement of Basis:** There is no substantive change to the permit.

#### Permit Condition #VII.G.3.

**Philip's request:** Remove the *less than ninety day* timeframe for submittal, and have submittal due dates contained in individual approved plans.

**EPA's proposal:** EPA agrees with part of Philip's proposal, but has kept the existing permit's 90 day "cap."

**Statement of Basis:** EPA agrees with Philip that data submittal dates should be set by the respective work plans, but does not agree that timeframes in those plans for data submittal should exceed ninety days.

## Permit Condition #VII.G.4.

Philip's request: No changes.

**EPA's proposal:** Make minor modifications, for clarity, to the proposal/approval process for the Appendix IX well selection.

Statement of Basis: EPA's proposal is not a

substantive change to the permit, except in proposing that groundwater inorganics be treated differently than other detected analytes if their concentrations are both below screening or remedial action levels, and in the range of background concentrations. EPA does not want to require Philip to unnecessarily monitor constituents whose levels are not likely to represent contamination from facility releases.

## Permit Condition #VII.G.5.

Philip's request: No changes other than replacing "PQL" with "screening level."

**EPA's proposal:** Make two modifications to Philip's G.5. One is insignificant; the other retains the PQL as the level to compare sampling results to.

**Statement of Basis:** This is not a substantive change to the permit. This general condition concerning the addition of 40 CFR 264 Appendix IX analytes to routine monitoring should remain focused on *detections*, not exceedances of standards.

## Permit Condition #VII.G.6.

Philip's request: Delete this condition.

EPA's proposal: EPA agrees.

Statement of Basis: The language in this condition has been integrated into earlier portions of Section VII.

#### Permit Section #VII.H.

Philip's request: Delete existing Section H ("Data Evaluation for Corrective Action Monitoring"). Insert existing Section J.

EPA's proposal: EPA agrees.

**Statement of Basis:** Existing Section H is now contained in Section E and in condition D.10.

## Permit Conditions #VII.H.1. through H.3.

Philip's request: Place existing J.1. through J.3. at these locations.

EPA's proposal: EPA agrees.

**Statement of Basis:** There is no substantive change to the permit.

## Permit Condition #VII.H.4.

Philip request: Place existing J.4. at this location, but modify it to allow project managers to make the well-replacement decision.

**EPA's proposal:** EPA agrees with the second paragraph of Philip's proposal. The Agency has modified the first paragraph, for consistency, to include the standard Draft Permit Modification proposal/approval process.

Statement of Basis: There is no H.4. presently. This change to J.4.'s language allows Philip and EPA to decide -- at the time a monitoring well must be decommissioned -- how quickly it should be replaced and where the replacement should be located. The parties may not want to be constrained to the timing and locations contained in existing J.4.

# Permit Conditions #VII.H.5. and H.6.

**Philip request:** Place existing J.5. and J.6. at these locations.

**EPA's proposal:** EPA agrees.

**Statement of Basis:** There is no H.5. or H.6. presently. This is not a substantive change to the permit.

# Permit Condition #VII.H.7.

**Philip request:** Place existing J.7. at this location, but make a minor modification to its language.

**EPA's proposal:** EPA agrees, with one minor modification.

Statement of Basis: There is no H.7. in the existing permit. The modification to J.7. allows Philip to submit well information within sixty days, or per a Work plan date approved by EPA. Similarly to the modification proposed for H.4., this change gives the parties more flexibility to set the submittal due-date to a date proposed and approved in a Plan specific to the well(s) in question.

## Permit Section VII.I.

Philip request: Delete existing language in Section I ("Data Evaluation for Compliance monitoring") and insert language from Sections K and L.

**EPA's proposal:** EPA agrees.

**Statement of Basis:** Since existing Section I has been integrated into Section F, there is no substantive change to the permit.

#### Permit Condition #VII.I.

Philip request: Insert Section K language here, but modify the language to state that an approved Closure Plan will be submitted at least ninety days before the commencement of closure activities.

EPA's proposal: Modify Philip's proposal so that the Plan submitted as a permit modification request is not an "approved" plan. Also, EPA proposes two clarifications: (1) the proposed closure plan will routinely be considered a Class 2 permit modification, and (2) "closure" in the sense used in this part of section VII does not necessarily refer to RCRA hazardous waste treatment, storage, or disposal units.

Statement of Basis: This is basically the permit's Section K language, modified for clarity.

# Permit Condition VII.I.1.

Philip request: Place portions of existing Section L language at this location. Modify the language to allow for sixty days after the Corrective Measure Work Plan approval to submit the costs of closing the remedial system. Also, remove the requirement (in L.1.) for estimating the costs of the Corrective Measure system itself.

**EPA's proposal:** EPA proposes minor modifications to Philip's proposal.

Statement of Basis: Sixty days to prepare and submit the closure costs is reasonable; thirty days -- depending on the system and how it has changed from the Draft Work plan to the Final, approved, Work Plan --

may be too short. Costs for constructing and operating the Corrective Measure itself will be contained in the Work Plan.

#### Permit Condition #VII.I.2.

Philip request: Insert existing L.3. language here, but modify it to trigger cost estimate adjustment on publication of the new year's inflation factor.

**EPA's proposal:** Add, to Philip's proposal, that the adjustment shall be submitted to EPA and/or Ecology.

Statement of Basis: The adjustment will still be accomplished yearly, but will be triggered by publication of the annually-modified inflation factor, which must be used in the adjustment calculations.

#### Permit Condition #VII.I.3.

Philip request: Insert existing L.6. language here, but modify it to keep cost estimates required by G.2. in the operating record.

**EPA's proposal:** Remove the reference to "G.2.", and refer to new condition A.9., but otherwise accept Philip's proposal.

Statement of Basis: This is not a significant change to the permit or to Philip's proposal.

## Permit Condition #VII.J.

Philip request: Remove existing Section J. (it has been moved into Section H of the Draft Permit Modification) and insert existing Section M. language here. Modify it to change "fifty" days to sixty.

EPA's proposal: EPA approves of Philip's proposal, with minor modification.

**Statement of Basis:** This is not a significant change to the permit.

## \*Permit Conditions #VII.J.1., J.2., and J.3.

Philip request: No changes.

**EPA's proposal:** EPA proposes to require Philip to estimate the costs of completing corrective action at three steps in the process (during submittal of the RFI

Report, during submittal of the CMS Report, and during submittal of the CM Work Plan), and then provide financial assurance for these amounts.

Statement of Basis: EPA's proposal is a significant change to the permit, but is needed to ensure that sufficient funding is earmarked for completion of corrective action and protection of human health and the environment. Such requirements are in other Region 10 permits. The existing permit only requires financial assurance based on a corrective action completion cost estimate once EPA approves the design and implementation plans for the selected Corrective Measure. EPA's proposal broadens this requirement to provide for financial assurance prior to remedy selection; this protects the public from the need to fund or partially fund corrective action at facilities where assets become insufficient to cover remedial costs prior to remedy selection.

#### Permit Section VII.K.

**Philip request:** Insert existing Section N. language here.

EPA's proposal: EPA agrees that existing N. should be placed at this location, but modifies Philip's proposal so that: a) the word "disapproval" is inserted throughout the <u>Dispute Resolution</u> section, along with "modification;" b) the Permittee is aware that invoking Dispute Resolution does not stay or waive other requirements in the permit; and, c) the process in existing N.1.c. is clarified.

Statement of Basis: Existing Section K is moved to Section I in the Draft Permit Modification. EPA's changes to the permit language in the new Section K make the requirements clearer and more enforceable. The omission of "disapproval or", coupled with "modification", throughout this section of the existing permit, makes it difficult to discern the procedures to follow when EPA disapproves a document or action. New language in K.2. is taken from EPA's model dispute resolution language.

#### Permit Section VII.L.

Philip request: Remove existing Section L. (it has been moved into Section I of the Draft Permit Modification) and insert existing Section O. language here. Modify it to delete O.2.

**EPA's proposal:** EPA agrees, but has modified Philip's proposal to include the offer of reasonable compensation to off-site property owners who experience business disruptions resulting from the Permittee's activities on their property.

Statement of Basis: Condition 0.2. referred to the "Off-site RFI" and is now obsolete. Existing 0.1. has been proposed for modification, as noted above, because EPA believes that "best efforts" to obtain access include the offer of reasonable compensation, when applicable. The addition of this language clarifies the requirements of the condition.

#### Permit Section VII.M.

Philip request: Remove existing Section M. (it has been moved into Section J of the Draft Permit Modification). Insert existing Section P.

**EPA's proposal:** EPA agrees, but has inserted "in a timely manner" into the existing section P language.

Statement of Basis: This is not a significant change to the permit. The condition already states that the submittal should be received at the "earliest opportunity." EPA's additional, proposed language clarifies the Agency's expectation that best efforts in obtaining any needed permits shall be judged in the context of the temporal needs of corrective action.

#### \*Permit Section VII.N.

Philip request: Remove existing Section N. (it has been moved into Section K of the Draft Permit Modification) and replace it with Section Q. Re-word the title of the section.

**EPA's proposal:** EPA proposes to delete the first paragraph of Philip's proposal (language in existing Q.), the language concerning schedule extensions, and the language about revisions to Table VII.1. not requiring permit modification.

Statement of Basis: EPA proposes to eliminate the concept of formal schedule extensions in Section VII of Philip's permit. Although Philip's project manager may informally propose a new due date for a late submittal or action to EPA, the Permittee need not go through the formal process described in the permit. EPA expects that Philip will make best efforts to submit documents

before the due date, and in the event a particular document (or action) requires more time to prepare or carry out, the Agency expects Philip to complete its requirement as soon as possible.

This does not imply that all failures to meet the schedule will necessarily lead to enforcement action by EPA. The Agency will, of course, use enforcement discretion in cases where Philip misses scheduled due dates, and the circumstances behind tardy submittals or actions will be duly taken into consideration.

This also does not mean that Philip may not propose permit modifications to change deliverable due dates. The facility retains this option. EPA, however, proposes the elimination of formal schedule extensions in the absence of permit modification because: (1) since 1993 the permit's corrective action schedule has not been complied with, and (2) the public has recently, and reasonably, asked EPA to find ways to keep corrective action on schedule and to alert them to instances where significant departures from the schedule occur.

In any case, most significant changes (more than a few days) proposed to Table VII-1 will, per regulations at 40 CFR 270.42, require permit modification.

## Corrective Action Schedule (Table VII.1.).

Philip request: Leave items 1, 6, 7, 8, 9, and 10 as they are, but note the completion dates of these historical documents in the right-hand column of the table. Also: a) add items 4, 5, and 11 through 18 to the table and, b) move existing items 12 and 13 to 19 and 20.

#### EPA's proposal:

- delete Philip's proposed items 1, 7, 8, 9, and 10 from the table
- add items and due dates related to the Risk Assessment Work Plan
- modify Philip's proposed item 4 to include a "hard" due date
- agree with Philip's proposals for items 5 and 6
- agree with Philip's proposals for items 11 and 12,

but modify them to remove "Feasibility" from the CMS Report

- agree with Philip's proposal for item 13, but modify it to remove: "Class 3" from the Modification, "Statement of Basis" from the heading, and "Feasibility" from the CMS Report, Item 13 is proposed to become a (modified) combination of Philip's 13 and
- agree with Philip's proposal for item 14, but move it to item 13
- insert Philip's proposed item 15 into item 14, but change the due date to 60 days following the effective date of the remedy-selection permit modification
- agree with Philip's proposals for items 16 through 19, but place these at items 15 through 18. Also, change the due date for proposed Item 16 so that the draft CM Work Plan is submitted no later than 180 days after the effective date of the Corrective Measure permit modification
- delete Philip's item 20
- modify the footnote to the table to be consistent with the proposal to select the Corrective Measure per an agency-initiated permit modification

Statement of Basis: This table establishes clear and enforceable schedules for the Comprehensive RFI Report and the Corrective Measures Workplan. A schedule is also proposed for new corrective action documents required by the modified permit. Philip's modification request is a significant improvement of the existing schedule.

Schedules are proposed in EPA's Draft Modification Table which are reasonable, based on experiences at other contaminated sites, and the scope of the work required by the modified permit. "Contingent" dates are used (due dates set to so many days following a previous action) because: (1) if an early due date is missed, the schedule is still valid since it does not contain calendar dates; and, 2) in general, it is not reasonable to require Philip to submit a document by a certain date if the document preceding it, and necessary for its preparation (i.e., on the critical path), has not been approved yet.

Changes made to Philip's proposal are based on the following rationale: a) the corrective action schedule does not need to document dates for previously prepared documents; b) a hard date of June 1, 2001, is proposed for submittal of the draft Comprehensive RFI Report. Several members of the public commented verbally (during the comment period on Philip's request) that at least one hard date should be included in this schedule, and EPA agrees; c) an appropriate due date for the draft Corrective Measure Design and Implementation SOW is better scheduled in the permit modification documenting the selection of a Corrective Measure; d) there is no due date associated with item 20, so it need not be included in the table; e) the Risk Assessment Work Plan, which has yet to be finalized, should be inserted as a permit deliverable; f) the submission of the CM Work Plan, the most significant post-remedy selection document in the permit, should not be submitted more than six months after the remedy-selection permit modification is finalized. EPA proposes this time period (180 days) as a "no longer than" guarantee for this document's submission. The document must therefore be submitted by this date irrespective of the status of the Scope of Work; and, q) Items and the footnote must be consistent with language in D.3. describing the permit modification process as "agency-initiated" (per 40 CFR 270.41).

## Table VII.2.

Philip request: Replace the existing table with one submitted with the modification request.

EPA's proposal: EPA has concluded that no changes -outside of the "automatic" changes, such as adding
newly detected constituents -- to the current PreCorrective Action Monitoring Program should be made
until the end of the RFI. A new table has been
inserted into Table 2, formatted similarly to Philip's
request, reflecting the current status of PreCorrective Action Monitoring.

Statement of Basis: Until the RFI Report has been finalized, and EPA and the public have been able to comprehensively review and analyze data resulting from the Pre-Corrective Action monitoring program, significant changes to the program are premature.

#### Table VII.3.

**Philip request:** Remove the existing table and replace with a 40 CFR 264 Appendix IX list of constituents and their respective screening levels.

EPA's proposal: EPA appreciates Philip's preparation of this table; the Agency expects it to be a worthwhile product for the authors and reviewers of the RFI Report. EPA agrees that Table 3 should be removed from the permit, but proposes that Philip's table not be inserted.

Statement of Basis: Such a listing of hazardous constituents and their present health-based screening levels is not needed in the permit, and modification of the screening levels -- as the toxicity of the constituents is revised -- would require a permit modification. Furthermore, Philip does not reference this table in the text of Section VII.

Existing Table 3, a schedule for the wells and frequency of sampling in "Corrective Action" (now called "Corrective Measure") monitoring, unnecessarily restricts both Philip and EPA in preparing plans for this monitoring per proposed condition E.1. Since the Corrective Measure Monitoring Plan, as proposed, is not due to EPA until the submission of the Draft CM Work Plan, it is premature to contain a well list in the permit at this time (when the RFI has yet to be completed). EPA now believes such a plan should not be restricted to particular wells and sampling frequencies, or submitted until the Corrective Measure-selection permit modification is finalized.

#### Table VII.4.

Philip request: Delete the existing table.

EPA's proposal: EPA denies this request.

Statement of Basis: Similar to other Region 10 permits, EPA proposes that a table of cleanup standards remain in the Philip permit. EPA has additionally proposed that the same constituents and standards remain in the table. As stated earlier, the Agency expects these values to be used in the RFI and CMS Reports, along with other remedial action levels.

#### Attachment MM

**Philip request:** Delete the existing MM language and replace it with the contents of Attachment NN (interim measure justification questions).

EPA's proposal: EPA agrees.

Statement of Basis: The existing MM language, concerning required modifications to the 1990 Off-site Workplan, is obsolete.

## Attachment NN

Philip request: Delete.

EPA's proposal: EPA agrees, but proposes to use this attachment to place the Final RFI Addendum Scope of Work, the Pre-Corrective Action Monitoring Plan, the Supplemental Off-site Characterization Work Plan, and the Soil Gas Sampling and Analysis Plan. Philip continues to perform tasks required by these EPA-approved plans and scopes of work.

**Statement of Basis:** The existing NN language is moved to Attachment MM. The documents proposed for insertion into NN are those which Philip must adhere to in completing the RFI and performing Pre-Corrective Action Monitoring.

<sup>\*</sup>NOTE: an asterisk by a permit condition signifies that EPA initiated changes to at least portions of the permit language per 40 CFR 270.41.

# ATTACHMENT A

## "COMPREHENSIVE GROUNDWATER MONITORING EVALUATION BACKGROUND SUMMARY REPORT" prepared by Tetra Tech for EPA October 20, 1999

At this time, there is no electronic copy of Attachment A, so it will have to be reviewed in hard copy at the EPA Regional Office Library or at the Beacon Hill Library in Seattle, WA.

## ATTACHMENT B

#### PUBLIC COMMENTS RECEIVED ON PHILIP'S MODIFICATION REQUEST

Philip Services submitted a RCRA permit modification request to EPA on May 27, 2000, and gave notice to the public of the opportunity to review, and comment upon, their proposals from May 27 to August 26, 2000.

Comments from the public were received (by EPA) at three meetings: in Renton on June 19, 2000 (the official Class III public meeting), in Georgetown — as part of a Georgetown Community Council meeting — on July 24, 2000, and in the Eagles Auditorium at 6205 Corson S., Seattle, on August 10, 2000. In addition, comments were communicated to EPA via letters, and concerns were expressed via EMAILs and telephone conversations.

These comments and concerns are summarized below. EPA's response to these comments and concerns is also provided, along with an indication of what, if any, changes were made to the proposed permit language.

#### Comment 1

Many commenters expressed opposition to Philip's continued operation of their Georgetown business as a RCRA Hazardous Waste storage facility. These concerns have been forwarded to the Washington State Department of Ecology. The state is authorized for the RCRA program and early next year will be evaluating Philip's application to renew their expiring, operating permit. These comments will better inform the state about the local population's position regarding such renewal. Ecology will make the determination of whether Philip should be granted a new operating permit, and if granted, what requirements should be contained in that permit.

In addition, Ecology will replace EPA as the lead regulatory agency responsible for overseeing RCRA corrective action (Section VII of the existing permit) at the Georgetown site at the time the permit is renewed. Although the state was not authorized for Corrective Action in 1991, it has subsequently been granted such authorization. EPA, therefore, assumes that Ecology will select the final cleanup option for the site following opportunities for public comment.

It should be noted, however, that even if Philip did not obtain a new operating permit, and ceased operating the

Georgetown facility, investigations and cleanup obligations would remain, which must be satisfactorily addressed.

#### Comment 2

Some commenters expressed dismay that EPA would propose to modify Philip's existing permit, establishing a future schedule for investigation and other cleanup study reports, when similar reports were due seven years ago per conditions in the existing permit.

Requirements for cleanup in the 1991 RCRA permit foresaw a very short investigation, followed by a very short period for EPA and the public to review potential cleanup technologies. Both the investigation report and the cleanup workplan were scheduled to end in 1993.

The investigation of the site began in the late 1980s, but proceeded sporadically until 1998 when a concerted effort began to obtain sufficient information to end the investigation stage of the cleanup. The field investigation is scheduled to be completed over the next several months and Philip will submit a draft report of the activities conducted over the investigation period to the Agency for review by (as proposed in the permit modification) June 1, 2001. Once the Report is finalized, and approved by EPA, Philip will complete an evaluation of potential cleanup solutions ("Corrective Measures" or "remedies"). Portions of this evaluation have already started, and will continue, while the investigation and its report are completed. Ecology and EPA will then review a report of the study of potential cleanup solutions.

The best way to improve Corrective Action progress at this site in the future is to modify the permit to establish an up-to-date, enforceable schedule, and change permit conditions so that they are more clearly enforceable.

#### Comment 3

Several commenters expressed concern about air quality in the vicinity of the Philip facility. Some of these concerns have been forwarded to Ecology, the Puget Sound Clean Air Agency (PSCAA), and the State Department of Health. These agencies are the regulatory bodies in charge of overseeing air emissions from Philip's operations.

A letter from EPA, dated December 5, 2000, is contained in the Administrative Record. This document discusses the findings of indoor air, outdoor air, and soil gas sampling and analyses undertaken in August 2000. EPA's conclusions at this time about risks via the groundwater-to-indoor air

pathway are that: (1) health risks to persons breathing outdoor, ambient air in the vicinity of the Philip-Georgetown facility are significant; (2) although Philip's facility undoubtably contributes something to this outdoor contamination, we are uncertain of the magnitude of the contribution; (3) health risks to certain persons breathing indoor air downgradient of the Philip-Georgetown facility are also significant; (4) some of the contaminants found in indoor air are also found in groundwater and/or soil gas contaminated by releases from the Georgetown facility; and (5) again, although volatile contaminants in groundwater (due to Philip facility releases) undoubtably contribute something to the indoor air contamination we have measured, we are uncertain of the magnitude of the contribution.

Soil gas sampling will be continued in off-site areas, as well as another round of indoor air sampling (this winter). A full analysis of the results will be contained in the draft RFI Report, proposed for June 1, 2001, in EPA's draft permit modification. The final RFI Report, once approved by EPA, will conclude with a decision as to whether the risks to indoor residents and workers -- associated with contaminated groundwater and soil gas -- are acceptable or not. If the risks are unacceptable, Philip will conduct a Corrective Measures Study to evaluate the best remedial response to the contamination.

## Comment 4

One commenter felt that EPA did not ensure that Philip gave "effective notice" of the May 2000 permit modification request. This is because the notice did not discuss the particular changes in, or the purpose of, what was being proposed.

Philip's legal notice did not contain a listing of specific potential changes to the permit. It did give a general description of the proposed modification, however, that was adequate for inclusion in a legal notice. Even so, EPA believes that in the future information for the public concerning this facility should be more descriptive. This does not necessarily mean that the legal notice itself contain more specific information. Other venues exist for communicating more effectively with the public. For this draft modification, e.g., EPA has conducted an open house, has prepared fact sheets and this Statement of Basis, has placed a legal notice in the newspaper, has run radio announcements, and has announced our action on our Region 10 Website.

The draft permit modification contains a requirement for a Community Relations Plan; EPA expects Philip to

describe in this Plan the community involvement tasks they intend to conduct beyond the minimum requirements of 40 CFR 270.42.

#### Comment 5

A commenter noted that only three or four individuals were provided the text of Philip's modification request, and that the copies were received well after the beginning of the comment period.

EPA verbally offered on several occasions during the comment period to provide copies of Philip's modification request to members of the public, but no one requested copies except for one individual. It is also our understanding that Philip provided copies of the permit modification request to several individuals who requested them. Due to a copying error, some of the initial copies only contained half of the document, however. This was remedied as soon as it became known. This was one of the factors that led EPA and Philip to decide to extend the comment period from sixty to ninety days.

#### Comment 6

A commenter noted that the August 10, 2000, public meeting at the Eagles Hall did not focus on the permit modification.

Philip and EPA were prepared at the meeting to discuss the permit modification request. Public concern and questions, however, focused on Corrective Action issues (such as the types of contamination emanating from the facility and what had and had not been done about that contamination over the years since the permit was issued) and the siting of the facility.

A public meeting (in the form of an open house) was held on November 30, 2000, to discuss EPA's draft permit modification. A public hearing has been scheduled for February 15, 2001. Individuals are welcome to contact EPA by phone, letter, or EMAIL during the comment period to ask questions or communicate concerns\*.

 $<sup>^{\</sup>star}$  NOTE: Formal comments on EPA's draft permit modification must be provided to the Agency during the comment period in writing, or presented verbally at the public hearing. Comment 7

A commenter stated that Philip's proposed permit modification favors Philip itself at the expense of the public's welfare. The commenter also stated that the tone of the modification request "seems to be moving away" from the idea that Philip will meaningfully cleanup their contamination. The comment did not include specific examples of these concerns.

Philip's modification request has been carefully reviewed. In addition, public comments, as well as EPA's regulations and relevant guidance, have been thoroughly considered. The draft permit modification includes modifications requested by Philip, as well as modifications EPA believes are necessary to ensure that the final permit is protective of human health and the environment and enforceable.

#### Comment 8

One commenter requested that air canisters be provided to residents close to the facility so that they may be able to take samples of air when they smell an odor.

Based on the sampling conducted last August, and the significant sources (mobile and industrial sources) of air toxics in the area near the facility, EPA does not at this time think the commenter's requested action is required to characterize the potential harm to human health and the environment from contaminants volatilizing off the contaminated aquifer. This has not been discounted as part of a potential final Corrective Measure for the site, however.

Moreover, the RCRA corrective action work being carried out pursuant to the Philip permit has been focused on air contamination that could be caused by the volatilization of groundwater contaminants. In addition to this, we will also evaluate all remedial measures, already implemented (such as the Soil Vapor Extraction system), as well as to-beimplemented, that may result in air emissions. However, addressing some of the other emissions from the Philip facility are outside of the corrective action authority of Section VII of Philip's permit. Members of the public with concerns about odors in the vicinity of the Philip facility should contact the Washington Department of Health at 1-877-485-7316 (who are currently working on an assessment of these other sources, or potential sources, of air contaminants), or the Puget Sound Clean Air Agency (PSCAA) at (206) 343-8800.

#### Comment 9

A commenter requested that EPA impose sanctions against Philip for not completing the RCRA Facility Investigation, or the Corrective Measures Workplan, per the permit's due dates. EPA was also asked to sanction Philip for failure to notify neighboring landowners about contamination underlying their properties.

In 1999 EPA initiated a Comprehensive Monitoring Evaluation (CME) of Philip's performance in meeting requirements in Section VII of their existing permit. A Report of that evaluation and a letter from EPA, noting apparent deficiencies in Philip's practices, were provided to Philip on November 3, 2000. Philip is obligated to respond to these documents by January 18, 2001. As part of the Agency's response to Philip's submission, the commenter's request will be considered.

The existing permit does not require immediate notification of neighbors receiving off-site groundwater contamination caused by facility releases. Nor does EPA's draft permit modification. A requirement has been added to the draft permit modification's draft RFI Report, however, requiring Philip to notify property owners whose property overlies groundwater contaminated above drinking water standards, or at levels sufficient to pose a potential threat to indoor air quality.

## Comment 10

A commenter noted that condition VII.A.4.(d) of Philip's proposed permit modification should be revised to include groundwater monitoring at locations 0.5 miles north, south, and west of the facility.

Although the Agency is in favor of installing more offsite wells, and Philip has already proposed additional locations (in the September 29, 2000, approved Supplemental Off-site Characterization Work Plan), EPA does not agree that wells should be placed at locations strictly set by an arbitrary distance in three compass directions from the facility property. There will be more opportunities for increasing the number of wells (or at least, adding new wells) as corrective action proceeds.

## Comment 11

A commenter stated that condition VII.A.6. of Philip's proposed permit modification should be revised to compel Philip to submit more frequent progress reports.

Although the Agency has added language to proposed condition VII.A.6., allowing for quarterly progress reports

to be called for in the future, EPA disagrees with the commenter's rationale that more frequent progress reports during the RCRA Facility Investigation or the Corrective Measures Study will lead to better compliance with the Corrective Action Schedule. EPA does not rely now on these progress reports to manage the speed of the investigation and cleanup; more of these reports may actually slow down Philip's progress by adding to their document burden. Regulatory management of the site is best accomplished when EPA can assign the facility to a project manager who has sufficient time to track Corrective Action progress continually, and intercede quickly once milestones appear to be in jeopardy of being missed. EPA has shifted resources to ensure that the Philip-Georgetown project manager has this time.

The draft permit modification tailors progress report submittals during cleanup design, implementation, and monitoring to the needs of those stages. In addition, the Agency's draft permit modification requires submission of a Community Relations Plan. In this document Philip will be required to include actions/mechanisms for keeping the public abreast of corrective action developments.

## Comment 12

A commenter requested that condition VII.C.1. of Philip's proposed permit modification be revised to acknowledge the priority of protecting human health and the environment over "consistency" with the final Corrective Measure in designing and selecting Interim Measures.

EPA agrees. EPA's Draft Permit Modification (at VII.C.1.) corrects this language.

### Comment 13

A commenter asked that condition VII.D.1. of Philip's proposed permit modification be revised to delete language allowing the facility to evaluate actions which would not attain risk-based remedial action levels.

The draft permit modification does not include language allowing Philip to evaluate partially effective remedial alternatives in the Corrective Measures Study.

## Comment 14

A commenter noted that condition VII.D.4. of Philip's proposed permit modification should be revised to include methods for ensuring that all residents within a mile of the

Philip facility receive notifications of public comment periods. In addition, the commenter proposed that courier routes should be used instead of mailing lists, and that notices regarding public comment periods be posted at the facility and provided to the Georgetown Community Council.

EPA agrees that although Philip followed federal regulatory requirements for providing notice of their permit modification request last May, the requirements themselves did not ensure that everyone interested in developments at the Philip facility were notified of the public comment period and the public meeting. However, for the purposes of notifying the public of an extended comment period, and an additional public meeting, Philip more aggressively sought out individuals and groups, and utilized a courier route as the commenter suggests. EPA feels that this was a good effort, and in combination with the media attention given the facility, provided ample notification for the August meeting.

In making the Agency's draft permit modification available for public comment, EPA used the Department of Ecology facilities' mailing list (not specific to the Georgetown facility), the names of individuals notified of Philip's August 10 meeting, and those names known to us through phone calls and permit modification comments, to create a list for a "pre-Notice" mailer. This mailer was sent out on October 17, 2000. Recipients of the mailer were asked if they wanted to have their names included on a Philip-Georgetown facility-specific mailing list. Those individuals who responded affirmatively will be on a mailing list to receive notice of comment periods, meetings, etc., in the future. The rest of the community will be notified per federal regulations.

In response to the commenter, EPA believes that: the Georgetown Community Council will be on the Philip-Georgetown mailing list, unless they choose not to be, and this will ensure that they receive notifications of future permit modification comment periods; (2) Philip will consider the suggestion of posting notices on the facility (or perhaps their fence) for Philip-initiated RCRA proposals. This is not a regulatory requirement, however; and (3) the mailer/questionnaire sent recently by EPA to over a thousand addresses in the Georgetown area, soliciting interest in being on the Philip-Georgetown-specific facility mailing list, adequately served to notify the local area of the opportunity to be apprised of future actions and comment periods associated with the facility. In addition, a new permit condition has been added to Section VII.A. of the permit modification, requiring Philip to submit a Community Relations Plan. In approving the Plan EPA will encourage

Philip to use means of notification beyond those required by regulation, and to periodically solicit interest in the community -- via courier routes or other equally effective methods -- for inclusion on the facility mailing list.

#### Comment 15

A commenter requested that condition VII.D.7. of Philip's proposed permit modification be revised to add back in numerous passages from the existing permit. Philip's D.7. contains requirements for a Draft Corrective Measure Work Plan.

EPA disagrees in part. The Agency's newly proposed language properly restricts the Corrective Measure Work Plan scope to the Corrective Measure(s), and the objectives of that Measure, selected by the Agencies. Furthermore, EPA does not agree that the Groundwater Compliance Monitoring Plan be submitted as early as the commenter proposes (in the cleanup process). EPA also believes that condition g)i) (laboratory bench scale studies of the proposed Corrective Measure(s) system) should be optional, depending on the technologies chosen, and this is what the Agency proposes in the draft permit modification. If the Agency determines that such studies are warranted, the Work Plan must contain tasks for proceeding to, and completing, these studies in order to be approved.

Concerns expressed regarding existing condition g)ii) (minimizing transfer of groundwater contaminants to another media) are substantively addressed in draft condition VII.D.1., bullet #2. Concerns about existing condition g)iii) -- requiring systems to have little adverse impact on the environment, provide the greatest improvement over the shortest time period, and provide for the destruction of contaminants -- are substantively addressed in draft condition VII.D.1., bullets #2, #3, and #4.

EPA agrees with the commenter that minimizing transfer of groundwater contaminants to other media, designing systems to have minimal adverse impact on the environment, and preferring systems which achieve the remedial action objectives/levels fastest are worthy goals. EPA does not agree, however, that the permit should continue to stress destructive treatment. The primary emphasis of Corrective Measures is to most effectively remove the contaminants from contaminated media and reduce risk to (potential) receptors.

#### Comment 16

A commenter requested that condition VII.E.1. of Philip's proposed permit modification be revised to retain

some of the existing language.

EPA has chosen to propose modifications to existing VII.E., and this passage in particular. The Agency disagrees that the permit itself must continue to state that Corrective Action monitoring include sufficient wells to "demonstrate reversal of contaminant flow within the capture zone." Instead, the draft permit modification requires Philip to establish remedial objectives if the Environmental Indicator concerning the control of plume migration has not been met. This does not mean that a pump and treat-type Corrective Measure will not be selected for use at the Georgetown site; if it is, and the agencies decide that demonstrating reversal of contaminant flow within capture zones is a remedial action objective of the Corrective Measure(s), the remedial action and monitoring program will be designed accordingly.

#### Comment 17

A commenter requested that condition VII.E.2. of Philip's proposed permit modification be revised to shorten the time between the start-up of the groundwater corrective measure and the first progress report. The commenter also felt that progress reports should be submitted every six months thereafter.

EPA agrees that a progress report should be submitted within 6 months of the Corrective Measure start-up. Philip may not, however, after such a short time, be able to demonstrate that much progress is being made in remediating the contamination. EPA also agrees with the commenter that progress reports should initially be submitted frequently. The Agency's Draft Modification proposes quarterly reporting.

#### Comment 18

A commenter requested that condition VII.E.3. (VII.H.2. of Philip's existing permit) retain deleted language existing in H.2.

EPA agrees that Philip may not unilaterally discontinue operation of Corrective Action Monitoring, and implement Compliance Monitoring. The Agency has proposed to modify VII.E. and VII.D.10 to clarify this process.

#### Comment 19

A commenter requested that condition VII.I.5. of Philip's existing permit be restored (deleting Philip's proposed VII.F.6.), except for the paragraph numbering.

EPA proposes modifying section F of Philip's proposal in the Draft Modification. We have also proposed to keep the existing language requiring a three-year waiting period. Such intervals are consistent with requirements in other Region 10 permits and Corrective Action Orders.

#### Comment 20

A commenter asked that condition VII.H.4. of Philip's proposed permit modification be disapproved, and the existing language maintained. Philip's proposed H.4. (a modification to the existing permit's J.4.) discusses well abandonment and replacement.

The Agency is proposing changes to Philip's proposed language to make it clear that the ubiquitous Draft Permit Modification requirement concerning review and approval of facility proposals will be used to make decisions about well replacement. The speed and location of well replacement will be proposed by Philip and approved or disapproved by EPA. EPA believes that this process, described in the Draft Permit Modification, is an improvement over the existing permit's "automatic" requirement that a replacement well be installed as close as practicable to the well being decommissioned. It is easily conceivable, e.g., that EPA might prefer that an entirely new location be chosen for the replacement well.

#### Comment 21

A commenter maintained that condition VII.H.7. of Philip's proposed permit modification be revised to include the statement "whichever is earlier" at the end of the first sentence. Philip's proposed H.7. concerns submitting well logs and other information to EPA within sixty days, or -- and this is the proposed change to the existing permit -- by a schedule set in applicable work plans.

EPA disagrees with the commenter. To comply with the commenter's request and insert "whichever is earlier," EPA would create a situation where the Agency would only have the authority to approve submission schedules (for the respective information) that are shorter than sixty days. The Agency would prefer, as Philip has proposed, to have the freedom to approve work plan schedules that call for the information to be submitted later than sixty days, even though approving such longer intervals are not envisaged at the present time.

The Agency has, however, proposed to modify the condition so that it refers to VII.H.6., not J.5., and "set" is replaced by "approved."